# Understanding Food Choices in the Context of Globalizing Food Options 

Solveig A. Cunningham, Emory University, USA

Chandrika Doddihal, BLDE (Deemed to be) University, India

Nida Shaikh, Georgia State University, USA

Ashlesha Datar, University of Southern California, USA

Shailaja Patil, BLDE (Deemed to be) University, India

## Changing burden of disease and Nutrition Transition

- Underweight is still the leading cause of morbidity \& mortality
- Chronic diseases are increasing worldwide
- In urban India, "cross-over", with underweight in childhood and overweight in adulthood
- Nutrition Transition
- With globalization and economic development, people even remote places are exposed to new items
- Implications both positive and negative
- Increase the stability and diversity of food supplies
- Introduce calorie-rich-nutrient-poor items


## Research questions

In a remote district in Southern India that globalization is just reaching:

- How do people make decisions about food consumption when faced with new food options competing with traditional foods?
- Under what conditions are global vs. traditional items selected?


## Capturing transition as it occurs

- Vijayapura (Bijapur) District, Karnataka State in Southern India
- Vijayapura (Bijapur) city is the main urban center
- Population of 326,360
- Remote place recently undergoing economic and social change



## Developing pictorial instruments

- Database of >1000 foods and beverages available locally
- Designed picture cards
- Organized items into 6 food-groups:

1. fruit+vegetables
2. cereals+pulses
3. snacks+sweets
4. animal products
5. oils+sweeteners+condiments
6. beverages

- Categorized items into 3 types
a) local/traditional
b) national - non-local but of Indian origin
c) global/modern based
- Each food group contained multiple items from each origin type

Local
FRUIT
National
Global


SAVORY SNACKS
Local


5ugis


National


Global


## Developing choice game instruments

- Short questionnaires relating to picture cards
- Familiarity - ever seen and where
- Within each food group, among 1 local, one national and 1 global item:
- Consumption - ever and frequency
- Choice scenarios- which they would select under each condition:
- Had more money
- Wanted something tasty
- Were hungry
- Were considering their health
- Had time constraints
- To reduce respondent burden, each respondent was shown a randomlyselected subset of items


## Participants and surveys

- Interviewers were trained
- Randomization methods
- Survey instruments, field methods
- Knowing all of the items
- Participants
- Hospital-based sample
- 100 non-patients
- Adults who were visiting or waiting for a friend or relative



## Familiarity with local, national, and global foods Have you seen this...

| \% | Fruits \& vegetables | Cereals \& pulses | Snacks | Animal products | Oils, sweeteners, condiments | Drinks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Local/traditional |  |  |  |  |  |  |
| Advertised | 2 | 0 | 4 | 0 | 0 | 2 |
| Had it with a friend | 0 | 0 | 0 | 0 | 0 | 2 |
| Saw it at market | 71 | 37 | 40 | 60 | 44 | 25 |
| Have it at home | 60 | 86 | 82 | 60 | 73 | 81 |
| National/mixed |  |  |  |  |  |  |
| Advertised | 2 | 7 | 4 | 2 | 7 | 3 |
| Had it with a friend | 0 | 0 | 0 | 0 | 0 | 0 |
| Saw it at market | 86 | 76 | 76 | 70 | 77 | 75 |
| Have it at home | 34 | 31 | 20 | 12 | 16 | 19 |
| Global/modern |  |  |  |  |  |  |
| Advertised | 4 | 9 | 13 | 8 | 7 | 11 |
| Had it with a friend | 0 | 0 | 0 | 5 | 0 | 0 |
| Saw it at market | 33 | 54 | 66 | 55 | 36 | 37 |
| Have it at home | 0 | 14 | 15 | 6 | 0 | 6 |

## Consumption of local, national, and global foods

 Have you eaten this...| \% | Fruits \& vegetables | Cereals \& pulses | Snacks | Animal products | Oils, sweeteners, condiments | Drinks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ever consumed |  |  |  |  |  |  |
| Local/traditional | 96 | 100 | 100 | 98 | 98 | 98 |
| National/mixed | 97 | 76 | 67 | 50 | 64 | 75 |
| Global/modern | 7 | 30 | 47 | 44 | 14 | 24 |
| Consumed most frequently among those ever consuming |  |  |  |  |  |  |
| Local/traditional | 100 | 87 | 85 | 97 | 91 |  |
| National/mixed | 0 | 7 | 15 | 3 | 9 |  |
| Global/modern | 0 | 7 | 0 | 0 | 0 |  |

## Drivers of selecting away from local foods

| $\%$ |  <br> vegetables | Cereals <br> \& pulses |  | Animal <br> Snacks <br> products | Oils, sweeteners, <br> condiments |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Would change selection from local to national or global if... |  |  |  |  |  |
| ...have additional Rs. 250 | 0 | 12 | 8 | 5 | 6 |
| ...want something tasty | 0 | 13 | 3 | 0 | 0 |
| ... want something healthy | 0 | 9 | 6 | 4 | 6 |
| ... are hungry | 0 | 6 | 3 | 6 | 6 |
| ... have little time to prepare | 0 | 8 | 3 | 4 | 1 |

# Drivers of food choice <br> Why do you eat this often... 

| $\%$ |  <br> vegetables |  <br> pulses | Snacks | Animal <br> products | Oils, sweeteners, <br> condiments |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Reason for selecting the most frequently consumed item |  |  |  |  |  |
| Price | 0 | 3 | 4 | 0 | 0 |
| Ease of finding | 0 | 63 | 43 | 37 | 41 |
| Provides energy | $\mathbf{1 0 0}$ | 7 | 0 | 13 | 9 |
| Is healthy | 0 | 10 | 0 | $\mathbf{4 0}$ | 5 |
| Tastes good | 0 | 17 | $\mathbf{5 4}$ | 10 | $\mathbf{4 6}$ |

## Scenarios - What would you choose...?

| \% | Fruits \& vegetables | Cereals \& pulses | Snacks | Animal products | Oils, sweeteners, condiments | Drinks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ... if you had an additional Rs. 250 to spend |  |  |  |  |  |  |
| Local/traditional | 49 | 53 | 51 | 67 | 63 | 40 |
| National/mixed | 40 | 37 | 37 | 28 | 29 | 49 |
| Global/modern | 11 | 11 | 12 | 4 | 7 | 11 |
| ...if you want something tasty |  |  |  |  |  |  |
| Local/traditional | 46 | 83 | 53 | 80 | 38 | 56 |
| National/mixed | 52 | 10 | 31 | 20 | 57 | 41 |
| Global/modern | 2 | 7 | 16 | 0 | 5 | 3 |
| ... if you want something healthy |  |  |  |  |  |  |
| Local/traditional | 49 | 70 | 59 | 84 | 54 | 53 |
| National/mixed | 46 | 29 | 22 | 12 | 41 | 42 |
| Global/modern ... if you were hun | gry 6 | 2 | 20 | 4 | 5 | 5 |
| Local/traditional | 46 | 66 | 78 | 76 | 54 | 74 |
| National/mixed | 54 | 17 | 15 | 8 | 44 | 24 |
| Global/modern | 0 | 17 | 7 | 16 | 3 | 2 |
| ... if you had little time for preparation |  |  |  |  |  |  |
| Local/traditional | 48 | 59 | 80 | 78 | 67 | 82 |
| National/mixed | 51.9 | 24 | 16 | 6 | 31 | 15 |
| Global/modern | 0 | 17 | 4 | 16 | 3 | 3 |

## Food choice in a changing food environment

## What people eat

- People consumed local foods daily; non-local foods were generally not consumed daily
- Many people had tried non-local foods but did not consume frequently


## What people prefer

- Under most circumstances, people preferred local items
- Most people did not replace non-local goods under any circumstances.
- The most likely to change were cereal and pulses


## How choices engage with the food environment

- Most people knew local foods and had them at home
- Many had seen local and non-local foods while shopping
- Few people remembered having seen foods advertised, but most frequently for global foods
- No evidence of peer introduction to foods


## Research priorities in deciding whether/how to intervene

- How do diets change?
- What is adopted, what is abandoned, what is retained and why
" What do we mean by "rapidly changing diets"?


## Thank you!

> This project is supported by funding from the Drivers of Food Choice Projects managed by the University of South Carolina

## We are grateful -

To our participant schools and families for sharing their time; To our interviewers for their outstanding commitment; To our institutions and sponsors for invaluable support.

